

Title (en)

Conjugated Diene Rubber Modified With Polar Alkoxysilane, Method and Composition Thereof

Title (de)

Konjugierter Dien-Kautschuk, der mit polarem Alkoxysilan modifiziert wurde, Verfahren und Zusammensetzung dafür

Title (fr)

Caoutchouc de diène conjugué modifié avec un alkoxysilane polaire, procédé et composition de celui-ci

Publication

EP 2604630 A3 20140122 (EN)

Application

EP 12187927 A 20121010

Priority

- US 201161569881 P 20111213
- TW 101120085 A 20120605

Abstract (en)

[origin: EP2604630A2] A modified conjugated diene rubber is disclosed. A method for producing the modified conjugated diene rubber includes providing an alkali metal ion-containing conjugated diene rubber; and reacting the alkali metal ion-containing conjugated diene rubber with an alkoxysilane to generate the modified conjugated diene rubber, the alkoxysilane being of the structural formula: wherein R 1 , R 2 , R 3 are each independently selected from a group consisting of oxygen-containing C 2 -C 12 group and nitrogen-containing C 1 -C 12 group, the oxygen-containing C 2 -C 12 group has a carbon atom directly connected to oxygen atom of the alkoxysilane, the nitrogen-containing C 1 -C 12 group has a nitrogen atom directly connected to oxygen atom of the alkoxysilane, and R 4 is selected from a group consisting of C 1 -C 12 of alkyl, alkenyl, aryl, and alkoxy.

IPC 8 full level

C08C 19/22 (2006.01); **C08C 19/25** (2006.01); **C08C 19/44** (2006.01); **C08F 36/04** (2006.01); **C08L 19/00** (2006.01)

CPC (source: EP US)

C08C 19/22 (2013.01 - EP US); **C08C 19/25** (2013.01 - EP US); **C08C 19/44** (2013.01 - EP US); **C08F 4/56** (2013.01 - US); **C08F 8/30** (2013.01 - US); **C08F 36/04** (2013.01 - EP US); **C08F 36/06** (2013.01 - US); **C08F 36/08** (2013.01 - US); **C08L 19/006** (2013.01 - EP US)

Citation (search report)

- [AP] WO 2012078962 A1 20120614 - BRIDGESTONE CORP [JP], et al
- [A] EP 1939220 A2 20080702 - BRIDGESTONE CORP [JP]
- [A] US 2008146745 A1 20080619 - LUO STEVEN [US], et al
- [A] WO 2011028523 A2 20110310 - BRIDGESTONE CORP [JP], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2604630 A2 20130619; **EP 2604630 A3 20140122**; **EP 2604630 B1 20150318**; US 2013150522 A1 20130613; US 9260593 B2 20160216

DOCDB simple family (application)

EP 12187927 A 20121010; US 201213607450 A 20120907